Nontechnical soil descriptions describe soil properties or management considerations specific to a soil map unit or group of map units. These descriptions are written in terminology that nontechnical users of soil survey information can understand and are used to create reports. By linking the description to the soil survey map units these reports can be generated by conservation planners and other NRCS employees for distribution to land users. These descriptions are available through both TOOLKIT and NASIS.

In this subsection nontechnical descriptions are available through four categories they are Agronomic, Ecological Community, Urban, and Water Quality. Separate map unit to description links are provided for each category.

AGRONOMIC

The following agronomic categories are available below.

Category

aSOI - Soil Characteristics
bSAC - Soil Agronomic Characteristics
cH2O - Seasonal High Water Table
dCUL - Cultivation Limitations
eERO - Erosion Control
fIRR - Irrigation Needs
hPAS - Pasture and Hayland
iWMG - Water Table Management

Map Symbol	Compname	Non hydric LCU	Hydric LCU	Drained LCU	Undrained LCU
3	LUTTERLOH	3e5			
4	ALPIN	4s7			

Map Symbol	Compname	Non hydric LCU	Hydric LCU	Drained LCU	Undrained LCU
6	BAYVI		8w2		
	ISLES		8w2		
	ESTERO		8w2		
7	OTELA	3s21			
8	OTELA	4s21			
10	CHAIRES	4w5	4w24		
11	SHADEVILLE	2s2			
12	SHADEVILLE	2s2			
	SEABOARD	6s22			
14	RIDGEWOOD	4s25			
16	CROATAN		7w2		7w2
	DOROVAN		7w2		
17	ORTEGA	3s7			
18	HURRICANE	3w7			
19	KERSHAW	6s4			
21	LAKELAND	4s7			
23	LEON	4w5	4w24		
25	MANDARIN	6s7			
26	TOOLES	3w8	3w25		
	NUTALL	4w8	4w27		
27	MORIAH	3s24			
	PILGRIMS	4s26			
28	TOOLES	3w8	5w6		
	NUTALL	4w8	5w6		
29	TOOLES	3w8	7w6		
	NUTALL		5w4		
	CHAIRES	4w5	7w6		
30	OCILLA	3w7			
32	PLUMMER	4w7	4w26		
33	POTTSBURG	4w5	4w24		
35	RUTLEGE		6w3		6w3
36	RUTLEGE		6w4		7w6
37	SAPELO	4w5	4w24		
38	SCRANTON	3w5	3w24		
39	SURRENCY		5w6		6w3
44	TOOLES		7w6		
	NUTALL		7w6		
47	OTELA	3s21			
	ALPIN	4s7			
48	OTELA	3s21			
	ORTEGA	3s7			
50		8e1			
51	GOLDHEAD	3w4	3w23		

Map Symbol	Compname	Non hydric LCU	Hydric LCU	Drained LCU	Undrained LCU
52	MEGGETT		6w4		
	CROATAN		7w2		
53	NO LCU				
54	MAUREPAS		8w2		

Map Units without an LCU listed are either not suited to these uses or suitability is so variable that it must be determined on-site.

ECOLOGICAL COMMUNITY

The following categories are available below.

kRNG - Rangeland (not developed, no significant application in the area served by this field office.)
lWLD - Wildlife Suitability
mWOD - Woodland Suitability

EC 4 (Longleaf Pine-Turkey Oak Hills) - Map Units: 4, 17, 19, 21, 47

EC 5 (Mixed Hardwood and Pines) - Map Units: 7, 8, 11, 12, 14, 27, 30, 48

EC 7 (North Florida Flatwoods) - Map Unit: 3, 10, 18, 23, 25, 32, 33, 37, 38, 51

EC 12 (Wetland Hardwood Hammocks) - Map Units: 26, 29*

EC 18 (Salt Marsh) - Map Units: 6, 54

EC 21 (Swamp Hardwoods) - Map Units: 16*, 28, 29*, 35*, 36*, 39, 44, 52

EC 22 (Shrub Bogs - Bay Swamps) - Map Unit: 16*, 35*, 36*

* - These Map Units have more than one type of Ecological Community.

Map Units without an Ecological Community listed are not suited to these uses or suitability is so variable that it must be determined on-site.

URBAN USES

The following additional nontechnical descriptions are available for urban interpretations:

oURB - Urban Use Statement

A101 - Map Units - 6, 16, 28, 29, 35, 36, 39, 44, 52, 54

A102 - Map Units - 10, 23, 26, 32, 33, 37, 38, 51

A103 - Map Units - none

A104 - Map Units - 3, 14, 18, 25, 30, 53

A105 - Map Units - 4, 7, 8, 17, 19, 21, 47, 48

Map units without a link listed are either not suited to these uses or suitability is so variable that it must be determined on-site.

WATER QUALITY

The last group of nontechnical description in this subsection of this FOTG is that group dealing with water quality, specifically pesticide and nutrient management. The link between the statements and the map units is listed below as well as in section ii-I.

sWQ - Water Quality Statement
tPES - Pesticide Management Statemtent
uNUT - Nutrient Management Statement

01 - Map Units - none

02 - Map Units - 4, 7, 8, 12(Seaboard part), 17, 19, 21, 47, 48

03 - Map Units - 3, 14, 18, 23, 25, 27(Moriah part), 30, 32, 33, 35, 36, 37, 38, 39, 51

04 - Map Units - 6, 10, 11, 12(Shadeville part), 16, 26, 27(Pilgrims), 28, 29, 44, 52, 54

Nontechnical Soil Descriptions

2s2 Map Units 11, 12

aSOI","2s2","This map unit consists of nearly level and gently sloping, well drained to moderately well drained soils on uplands. They have sandy surface and subsurface layers 20 to 40 inches thick, and moderately slowly to slowly permeable loamy and clayey subsoil layers. Fractured, porous limestone is below the subsoil in Wakulla County."

"bSAC","2s2","These soils have a well aerated root zone that is limited at about 45 inches by fractured, porous limestone. The available water capacity averages low to moderate in the root zone. Natural fertility is low and crop response to fertilization is moderate. Rainfall is rapidly absorbed with little runoff. The erosion hazard is slight."

"cH2O","2s2","In normal years these soils have a seasonal high water table at a depth of between 42 and 60 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","2s2","These soils have moderate limitations for cultivated crops due to droughtiness during dry seasons and wetness during wet seasons. They can be cultivated safely with ordinary good farming methods, but droughtiness and rapid leaching of plant nutrients limit the choice of crops and the potential yields of adapted crops. With good management grain crops can be grown. Nutrient management maximizes yields."

"eERO","2s2","Row crops should be planted on the contour in alternate strips with cover crops. Crop rotations should include cover crops at least half the time. Soil improving cover crops and all residues of other crops should be left on the field."

"fIRR","2s2","Crops produced on these soils are not normally irrigated; however, yields can be increased with irrigation. Irrigation is feasible where water is readily available."

"hPAS","2s2","These soils are well suited to pastures. Hybrid bermudagrass and bahiagrasses are well adapted. They produce well where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields and good cover."

"iWMG","2s2","Water table management is not normally practiced on these soils."

3e5 Map Unit 3

"aSOI","3e5","This map unit consists of nearly level and gently sloping, somewhat poorly drained soils on low ridges within the flatwoods and broad flats of the uplands. They have rapidly permeable sandy layers to depths of 20 to 60 inches over moderately to moderately rabidly permeable subsoil."

"bSAC","3e5","The root zone of these soils is limited by a seasonal high water table in wet seasons and by droughtiness during periods of low rainfall. The available water capacity is low in the root zone. Natural fertility is low but the response to fertilizers is moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is moderate on that part of the map unit between 2 to 5 percent slopes which has been assigned to this capability class."

"cH2O","3e5","In normal years these soils have a seasonal high water table at a depth of between 18 and 30 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3e5,"These soils have severe limitations for most cultivated crops due to wetness in wet seasons, droughtiness during periods of low rainfall, rapid leaching of plant nutrients and the hazard of erosion on slopes greater than 2 percent. These factors also limit the choice of plants and reduces potential yields of adapted crops. Maximum yields require proper seedbeds and nutrient management. Soil improving cover crops and all crop residues should be left on the ground. Erosion control measures are needed on that part of the map unit between 2 to 5 percent slopes which has been assigned to this capability class."

"eERO","3e5","Erosion control measures are needed on these soils on slopes above 2 percent. These include contour cultivation of row crops in alternate strips with cover crops. Crop rotations are needed that include cover crops at least two-thirds of the time. Soil improving cover crops and all crop residues should be left on the soil. Conservation tillage or no-till best protect the soil."

"fIRR","3e5","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","3e5","These soils are moderately suited to pastures. Hybrid bermudagrass and bahiagrasses are adapted. White clover and lespedezas are also adapted. These soils produce good yields where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","3e5","Tile, or other types of drains, are needed for some crops such as tobacco that are damaged by high water table during the growing season. Tiles can also be used as a source for subirrigation during periods of low rainfall."

3s7 Map Unit 17, 48(Ortega part)

"aSOI","3s7","This map unit consists of nearly level and gently sloping, moderately well drained soils that occur on narrow to broad ridges and isolated knolls. They have very rapidly permeable sandy layers to depths of more than 80 inches."

"bSAC","3s7","The root zone of these soils is limited by a seasonal high water table in wet seasons and by droughtiness during periods of low rainfall. The available water capacity is low in the root zone. Natural fertility is low and crop response to fertilization is low to moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is slight."

"cH2O","3s7","In normal years these soils have a seasonal high water table at a depth of between 40 and 60 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3s7","These soils have severe limitations for most cultivated crops due to droughtiness and the rapid leaching of plant nutrients. These factors also limit the choice of plants and reduces potential yields of adapted crops. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"fIRR","3s7","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","3s7","These soils are moderately well suited to pastures. Hybrid bermudagrass and bahiagrasses are adapted. White clover and lespedezas are also adapted. These soils produce good yields where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","3s7","Tile, or other types of drains, are needed for some crops such as tobacco that are damaged by high water table during the growing season. Tiles can also be used as a source for subirrigation during periods of low rainfall."

3s21 Map Units 7, 47(Otela part), 48(Otela part)

"aSOI","3s21","This map unit consists of sloping, well drained soils on upland ridges. They have sandy surface and subsurface layers that are 40 to 80 inches thick, and moderately permeable loamy subsoil layers."

"bSAC","3s21","These soils have a well aerated root zone that is limited by a seasonal high water table in wet season and droughtiness during periods of low rainfall. The available water capacity averages low to moderate in the root zone. Natural fertility is low and crop response to fertilization is moderate. Rainfall is rapidly absorbed on well vegetated areas. Runoff from unprotected areas is slight and the hazard of erosion on these areas is slight to moderate."

"cH2O","3s21","In normal years these soils have a seasonal high water table at a depth of between 42 and 60 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3s21","These soils have severe limitations for cultivated crops due to droughtiness. Droughtiness and the rapid leaching of plant nutrients limit the choice of crops and the potential yields of adapted crops. Yields can be maximized with nutrient management. Crop rotations should include cover crops at least two-thirds of the time. These cover crops and all residues of other crops should be returned to the soil."

"eERO","3s21,"Moderate erosion control measures such as cultivating row crops on the contour in alternate strips with cover crops are needed."

"fIRR","3s21","Irrigation of some high value crops is usually feasible where irrigation water is readily available."

"hPAS","3s21","These soils are moderately well suited to pastures. Hybrid bermudagrass and bahiagrasses are well adapted but yields are reduced during periodic droughts. They produce well where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields, minimize the effects of droughts and to maintain good ground cover to minimize erosion."

"iWMG","3s21","Water table management is not normally practiced on these soils."

3s24 Map Unit 27(Moriah part)

"aSOI","3s24","This map unit consists of nearly level and gently sloping, somewhat poorly drained soils on low ridges. They have rapidly permeable sandy layers to depths of 20 to 40 inches and moderately slowly permeable loamy subsoils to depths of 40 to 60 inched over limestone bedrock."

"bSAC","3s24","The root zone of these soils is limited by a seasonal high water table in wet seasons and by droughtiness during periods of low rainfall. The available water capacity is moderate to low in the root zone. Natural fertility is low and crop response to fertilization is low to moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is slight."

"cH2O","3s24","In normal years these soils have a seasonal high water table at a depth of between 18 and 36 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3s24","These soils have severe limitations for most cultivated crops due to wetness during wet seasons and droughtiness during periods of low rainfall. These factors also limit the choice of plants and reduces potential yields of adapted crops. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"eERO","3s24","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","3s24","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","3s24","These soils are moderately suited to pastures. Hybrid bermudagrass, and bahiagrasses are adapted. White clover and lespedezas are also adapted. These soils produce good yields where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","3s24","Tile, or other types of drains, are needed for some crops that are damaged by high water table during the growing season. Tiles can also be used as a source for subirrigation during periods of low rainfall."

3w4 Non-hydric phase of Map Unit 51

"aSOI","3w4","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and other flat areas. They have sandy surface and subsurface layers 20 to 40 inches thick over moderately to moderately rapidly permeable loamy layers."

"bSAC","3w4","The root zone is limited by a seasonal high water table that comes to near the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","3w4","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3w4","These soils have severe limitations for cultivated crops because of wetness. With a total water management system, these soils are suited to such crops as corn and soybeans. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","3w4","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","3w4","Crops produced on these soils are not normally irrigated."

"hPAS","3w4","These soils are well suited to pastures and hay crops. Improved grasses such as improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w4","A total water table management system should remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

3w5 Non-hydric phase of Map Unit 38

"aSOI","3w5","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and other flat areas. They have sandy surface and subsurface layers 20 to 40 inches thick over rapidly to moderately rapidly permeable sandy or loamy layers."

"bSAC","3w5","The root zone is limited by a seasonal high water table that comes to near the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","3w5","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3w5","These soils have severe limitations for cultivated crops because of wetness. With a total water management system these soils are suited to such crops as corn and soybeans. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","3w5","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","3w5",Crops produced on these soils are not normally irrigated."

"hPAS","3w5","These soils are well suited to pastures and hay crops. Improved grasses such as improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w5","A total water table management system should remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

3w7 Map Units 18, 30

"aSOI","3w7","This map unit consists of nearly level and gently sloping, somewhat poorly drained soils on low ridges within the flatwoods and broad flats of the uplands. They have rapidly permeable sandy layers to depths of 20 to 60 inches over moderately to moderately rapidly permeable subsoil."

"bSAC","3w7","The root zone of these soils is limited by a seasonal high water table in wet seasons and by droughtiness during periods of low rainfall. The available water capacity is low in the root zone. Natural fertility is low but the response to fertilizers is moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is moderate on that part of the map unit between 2 to 5 percent slopes which has been assigned to this capability class."

"cH2O","3w7","In normal years these soils have a seasonal high water table at a depth of between 18 and 40 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3w7,"These soils have severe limitations for most cultivated crops due to wetness in wet seasons, droughtiness during periods of low rainfall, rapid leaching of plant nutrients and the hazard of erosion on slopes greater than 2 percent. These factors also limit the choice of plants and reduces potential yields of adapted crops. Maximum yields require proper seedbeds and nutrient management. Soil improving cover crops and all crop residues should be left on the ground. Erosion control measures are needed on that part of the map unit between 2 to 5 percent slopes which has been assigned to this capability class."

"eERO","3w7","Erosion control measures are needed on these soils on slopes above 2 percent. These include contour cultivation of row crops in alternate strips with cover crops. Crop rotations are needed that include cover crops at least two-thirds of the time. Soil improving cover crops and all crop residues should be left on the soil. Conservation tillage or no-till best protect the soil."

"fIRR","3w7","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","3w7","These soils are moderately suited to pastures. Hybrid bermudagrass and bahiagrasses are adapted. White clover and lespedezas are also adapted. These soils produce good yields where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","3w7","Tile, or other types of drains, are needed for some crops such as tobacco that are damaged by high water table during the growing season. Tiles can also be used as a source for subirrigation during periods of low rainfall."

3w8 Non-hydric phases of Map Units 26(Tooles), 28(Tooles), 29(Tooles)

"aSOI","3w8","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and upland hardwood hammocks. They have moderately permeable sandy surface and subsurface layers and loamy subsoils 40 to 60 inches thick over limestone bedrock."

"bSAC","3w8","The root zone is limited by a seasonal high water table that comes to near the surface in wet seasons and the limestone bedrock.. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow and response to artificial drainage is moderate. The hazard of erosion is slight."

"cH2O","3w8","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","3w8","These soils have severe limitations for cultivated crops because of wetness. With a total water management system these soils are suited to such crops as corn and soybeans. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","3w8","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","3w8",Crops produced on these soils are not normally irrigated."

"hPAS","3w8","These soils are well suited to pastures and hay crops. Improved grasses such as improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w8","A total water table management system should remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

3w23 Hydric phase of Map Unit 51

"aSOI","3w23","This map unit consists of nearly level, poorly drained soils on low flatwoods, low hammocks, and sloughs. They have sandy surface and subsurface layers 20 to 40 inches thick over moderately to moderately rapidly permeable loamy layers."

"bSAC","3w23","The root zone is limited by a seasonal high water table that is at or slightly above the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","3w23","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depths. During periods of high rainfall the water table may be above the surface for periods of brief duration."

"dCUL","3w23","Cultivation of these hydric soils is not recommended. If cultivated, these soils have severe limitations because of wetness. With a total water management system these soils are suited to a variety of fruit and vegetable crops. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","3w23","Crops produced on these hydric soils do not normally need special erosion control practices."

"fIRR","3w23","If cultivated, highest yields require irrigation during periods of low rainfall. Water can be supplied through subirrigation with a water table management system or by sprinklers."

"hPAS","3w23","These hydric soils are well suited to pastures and hay crops. Improved grasses such as the improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w23","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths of within 18 inches for vegetables and below four feet for citrus. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

3w24 Hydric phase of Map Unit 38

"aSOI","3w24","This map unit consists of nearly level, poorly drained soils on low flatwoods. They have sandy surface and subsurface layers 20 to 40 inches thick over rapidly to moderately rapidly permeable sandy and loamy layers."

"bSAC","3w24","The root zone is limited by a seasonal high water table that is at or slightly above the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","3w24","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depth. During periods of high rainfall the water table may be above the surface for periods of brief duration."

"dCUL","3w24","Cultivation of these hydric soils is not recommended. If cultivated, these soils have severe limitations because of wetness. With a total water management system these soils are suited to a variety of fruit and vegetable crops. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","3w24","Crops produced on these hydric soils do not normally need special erosion control practices."

"fIRR","3w24","If cultivated, highest yields require irrigation during periods of low rainfall. Water can be supplied through subirrigation with a water table management system or by sprinklers."

"hPAS","3w24","These hydric soils are well suited to pastures and hay crops. Improved grasses such as the improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w24","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths of within 18 inches for vegetables and below four feet for citrus. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

3w25 Hydric phases of Map Unit 26(Tooles)

"aSOI","3w25","This map unit consists of nearly level poorly drained soils predominately on broad, level landscapes on the flatwoods. These soils also occur on upland hardwood hammocks. They have sandy surface and subsurface layers and slowly permeable loamy and clayey subsoil over limestone bedrock at a depth of 40 to 60 inches."

"bSAC","3w25","The root zone of these hydric soils is limited by a seasonal high water table at or near the surface and the limestone bedrock. The available water capacity is low to very low in the root zone. Natural fertility is low but crop response to fertilization is moderate. The internal drainage is slow under natural conditions but the response to artificial drainage is rapid."

"cH2O","3w25","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depth. During periods of high rainfall the water table may be several inches above the surface for periods of brief duration."

"dCUL","3w25","These hydric soils have severe limitations for cultivated crops because of wetness and the depth to bedrock and cultivation is not recommended. If they are cultivated the variety of crops is very limited without an adequate total water table management system. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"eERO","3w25","Erosion control is not a management concern on these hydric soils."

"fIRR","3w25","If cultivated, highest yields require irrigation during periods of low rainfall."

"hPAS","3w25","These soils are only fairly suited to pastures and hay crops. Low to very low available water capacity is the main limitation. Improved grasses such as the improved bahiagrasses are adapted. Several varieties of clovers are also well adapted where properly managed. Moderate yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","3w25","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths for the planted crop. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

4s7 Map Units 4, 21, 47(Alpin)

"aSOI","4s7","This map unit consists of nearly level and gently sloping, well drained to excessively drained soils on to broad ridges. These soils have very rapidly permeable sandy layers to depths of more than 80 inches."

"bSAC","4s7","The root zone of these soils well aerated to a depth of 80 inches or more. Root development is limited by droughtiness. The available water capacity is low to very low in the root zone. Natural fertility is low and crop response to fertilization is low to moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is slight."

"cH2O","4s7","In normal years these soils do not have a seasonal high water table within a depth of 72 inches."

"dCUL","4s7","These soils have very severe limitations for most cultivated crops due to droughtiness and the rapid leaching of plant nutrients. These factors also limit the choice of plants and reduces potential yields of adapted crops. Crop rotations should include close growing crops on the land at least two-thirds of the time. Irrigation and nutrient management are requirements for acceptable yields. Soil improving cover crops and all crop residues should be left on the ground."

"fIRR","4s7","Although irrigation is a requirement for acceptable yields, due to the low water holding capacity of these soils, irrigation of all crops except a high value crops is not usually feasible. Locating a reliable and economical source of irrigation water is another management concern."

"hPAS","4s7","These soils are moderately suited to pastures. Deep-rooting plants such as Hybrid bermudagrass and bahiagrasses are adapted but yields are restricted due to droughtiness. Nutrient management is a required practice. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","4s7","Water table management is not normally practiced on these soils."

4s21 Map Unit 8

"aSOI","4s21","This map unit consists of sloping, well drained soils on upland ridges. They have sandy surface and subsurface layers that are 40 to 80 inches thick, and moderately permeable loamy subsoil layers."

"bSAC","4s21","These soils have a well aerated root zone that is limited by a seasonal high water table in wet season and droughtiness during periods of low rainfall. The available water capacity averages low to moderate in the root zone. Natural fertility is low and response to fertilization is moderate. Rainfall is rapidly absorbed on well vegetated areas. Runoff from unprotected areas is slight and the hazard of erosion on these areas is moderate."

"cH2O","4s21","In normal years these soils have a seasonal high water table at a depth of between 42 and 72 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4s21","These soils have severe limitations for cultivated crops due to droughtiness. Droughtiness and the rapid leaching of plant nutrients limit the choice of crops and the potential yields of adapted crops. The hazard of erosion is an additional management concern. Yields can be maximized with nutrient management."

"eERO","4s21,"Moderate erosion control measures such as cultivating row crops on the contour in alternate strips with cover crops are needed. Crop rotations should include cover crops at least two-thirds of the time. These cover crops and all residues of other crops should be returned to the soil"

"fIRR","4s21","Irrigation of some high value crops is usually feasible where irrigation water is readily available."

"hPAS","4s21","These soils are moderately suited to pastures. Hybrid bermudagrass and bahiagrasses are well adapted but yields are reduced during periodic droughts. They produce well when they are fertilized and limed. Controlled grazing is needed to maintain vigorous plants for maximum yields, minimize the effects of droughts and to maintain good ground cover to minimize erosion."

"iWMG","4s21","Water table management is not normally practiced on these soils."

4s25 Map Unit 14

"aSOI","4s25","This map unit consists of nearly level and gently sloping, somewhat poorly drained to moderately well drained soils on broad low ridges. They have sandy layers that are rapidly permeable to depths of more than 80 inches."

"bSAC","4s25","The root zone of these soils is limited by a seasonal high water table in wet seasons as well as droughtiness. The available water capacity is low to very low in all layers. Natural fertility is low and crop response to fertilization is moderate to low. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is slight."

"cH2O","4s25","In normal years these soils have a seasonal high water table at a depth of between 24 and 42 inches for 2 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4s25","These soils have severe limitations for cultivated crops. Droughtiness and rapid leaching of plant nutrients limit the choice of plants and reduces potential yields of adapted crops. If cropped, soil management should include row crops on the contour in alternate strips with close growing crops. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the land."

"eERO","4s25","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","4s25","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","4s25","These soils are fairly suited to pastures and hay. Plants such as hybrid bermudagrass and bahiagrasses are adapted. These soils require nutrient management to maximize yields. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","4s25","Tile or other kinds of drains are needed for some crops that are damaged by high water table during the growing season. Tile drains can also be used for subirrigation during periods of low rainfall."

4s26 Map Unit 27(Pilgrims part)

"aSOI","4s26","This map unit consists of nearly level and gently sloping, somewhat poorly drained soils on low ridges of the flatwoods. They have rapidly permeable sandy layers to depths of 6 to 20 inches and slowly permeable loamy or clayey subsoils to depths of 20 to 40 inched over limestone bedrock."

"bSAC","4s26","The root zone of these soils is limited by a seasonal high water table in wet seasons and by the limestone bedrock. The available water capacity is low in the the surface and subsurface layers and moderate in the subsoil. Natural fertility is low and crop response to fertilization is low to moderate. Rainfall is rapidly absorbed and there is little runoff. The hazard of erosion is slight."

"cH2O","4s26","In normal years these soils have a seasonal high water table at a depth of between 18 and 36 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4s26","These soils have moderate limitations for most cultivated crops due to wetness, but if adequately drained, corn soybeans, and peanuts can be grown. Crop rotations should include close growing crops on the land at least half of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"eERO","4s26","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","4s26","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","4s26","These soils are moderately suited to pastures. Hybrid bermudagrass, and bahiagrasses are adapted. These soils produce good yields where nutrient management is practiced. Controlled grazing is needed to maintain vigorous plants for maximum yields."

"iWMG","4s26","Tile, or other types of drains, are needed for some crops that are damaged by high water table during the growing season."

4w5 Non-hydric phases of Map Units 10, 23, 29(Chaires), 33, 37

"aSOI","4w5","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and other flat areas. They have sandy layers more than 72 inches thick and a spodic horizon within 30 inches of the surface."

"bSAC","4w5","The root zone is limited by a seasonal high water table that comes to near the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","4w5","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4w5","These soils have severe limitations for cultivated crops because of wetness. With a total water management system these soils are suited to such crops as corn and soybeans. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","4w5","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","4w5",Crops produced on these soils are not normally irrigated."

"hPAS","4w5","These soils are well suited to pastures and hay crops. Improved grasses such as improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","4w5","A total water table management system should remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

4w7 Non-hydric phase of Map Unit 32

"aSOI","4w7","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and other flat areas. They have sandy surface and subsurface layers 20 to 60 inches thick over moderately to moderately rapidly permeable loamy layers."

"bSAC","4w7","The root zone is limited by a seasonal high water table that comes to near the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","4w7","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4w7","These soils have severe limitations for cultivated crops because of wetness. With a total water management system these soils are suited to such crops as corn and soybeans. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","4w7","Crops produced on these soils do not normally need special erosion control practices."

"fIRR","4w7",Crops produced on these soils are not normally irrigated."

"hPAS","4w7","These soils are well suited to pastures and hay crops. Improved grasses such as improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","4w7","A total water table management system should remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

4w8 Non-hydric phases of Map Units 26(Nutall), 28(Nutall)

"aSOI","4w8","This map unit consists of nearly level poorly drained soils on flatwoods, hammocks, and upland hardwood hammocks. They have sandy surface and subsurface layers and loamy subsoils over limestone bedrock at a depth of 20 to 40 inches."

"bSAC","4w8","The root zone of these soils is limited be a seasonal high water table at or near the surface and the limestone bedrock. The available water capacity is low to very low in the root zone. Natural fertility is low and crop response to nutrients is low to moderate. The internal drainage is slow under natural conditions but the response to artificial drainage is rapid. The hazard of erosion is slight."

"cH2O","4w8","In normal years these soils have a seasonal high water table at a depth of between 6 and 18 inches for 1 to 4 months. In other months the water table is below these depths. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","4w8","These soils have severe limitations for cultivated crops because of wetness and the depth to bedrock. The variety of crops is very limited without an adequate total water table management system that designed to remove excess water in wet seasons and provide subirrigation during dry periods. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"eERO","4w8","Erosion control is not a management concern on these soils."

"fIRR","4w8","If cultivated, highest yields require irrigation during periods of low rainfall."

"hPAS","4w8","These soils are only fairly suited to pastures and hay crops. Low to very low available water capacity is the main limitation. Improved grasses such as the improved bahiagrasses are adapted. Several varieties of clovers are also well adapted where properly managed. Moderate yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","4w8","If cropped, these soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths for the planted crop. To obtain adequate drainage, the spacing of tile drains is important."

4w24 Hydric phases of Map Units 10, 23, 33, 37

"aSOI","4w24","This map unit consists of nearly level, poorly drained soils on flatwoods, hammocks, and other flat areas. They have sandy layers more than 72 inches thick and a spodic horizon within 30 inches of the surface."

"bSAC",4w24","The root zone is limited by a seasonal high water table that is at or slightly above the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilizer is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","4w24","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depth. During periods of high rainfall the water table may be above the surface for periods of brief duration."

"dCUL","4w24","Cultivation of these hydric soils is not recommended. If cultivated, these soils have severe limitations because of wetness. With a total water management system these soils are suited to a variety of fruit and vegetable crops. Management should include crop rotations that keep the soil in close growing cover crops at least two-thirds of the time. The cover crops and all other crop residue should be returned to the soil. Maximum yields require good soil tilth and nutrient management."

"eERO","4w24","Crops produced on these hydric soils do not normally need special erosion control practices."

"fIRR","4w24","If cultivated, Highest yields require irrigation during periods of low rainfall either subirrigated through a water table management system or by sprinklers."

"hPAS","4w24","These hydric soils are well suited to pastures and hay crops. Improved grasses such as the improved bahiagrasses are well adapted. Several varieties of clovers are also well adapted where properly managed. High yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","4w24","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths of within 18 inches for vegetables and below four feet for citrus. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

4w26 Hydric phase of Map Unit 32

"aSOI","4w26","This map unit consists of nearly level, poorly drained soils on low flatwoods, low hammocks, and sloughs. They have sandy surface and subsurface layers 40 to 80 inches thick over moderately to moderately rapidly permeable loamy layers."

"bSAC","4w26","The root zone is limited by a seasonal high water table that is at or slightly above the surface in wet seasons. The available water capacity averages moderate in the root zone. Natural fertility is low but crop response to fertilization is good. Internal drainage is slow but response to artificial drainage is moderate to rapid. The hazard of erosion is slight."

"cH2O","4w26","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depths. During periods of high rainfall the water table may be above the surface for periods of brief duration."

"dCUL","4w26","Cultivation of these hydric soils is not recommended. If cultivated, these soils have severe limitations because of wetness."

"eERO","4w26","Crops produced on these hydric soils do not normally need special erosion control practices."

"fIRR","4w26","If cultivated, highest yields require irrigation during periods of low rainfall either through subirrigation through a water table management system or by sprinklers."

"hPAS","4w26","These hydric soils are not suited to pasture or hay crops without an extensive water table management system."

"iWMG","4w26","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems will be needed to maintain the preferred water table depths. To obtain adequate drainage, the spacing of tile drains is important. Tile drains may be used for subirrigation during periods of low rainfall."

4w27 Hydric phase of Map Unit 26(Nutall)

"aSOI","4w27","This map unit consists of nearly level poorly drained soils on low flatwoods, low hammocks, and wetland hardwood hammocks. They have sandy surface and subsurface layers and loamy subsoils over limestone bedrock at a depth of 20 to 40 inches."

"bSAC","4w27","The root zone of these hydric soils is limited be a seasonal high water table at or near the surface and the limestone bedrock. The available water capacity is low to very low in the root zone. Natural fertility is low but crop response to nutrients is moderate. The internal drainage is slow under natural conditions but the response to artificial drainage is rapid."

"cH2O","4w27","In normal years these soils have a seasonal high water table at a depth of 6 inches or less for 2 to 6 months. In other months the water table is usually below this depth. During periods of high rainfall the water table may be above the surface for periods of brief duration."

"dCUL","4w27","These hydric soils have severe limitations for cultivated crops because of wetness and the depth to bedrock and cultivation is not recommended. If they are cultivated the variety of crops is very limited without an adequate total water table management system. Crop rotations should include close growing crops on the land at least two-thirds of the time. Nutrient management maximizes yields. Soil improving cover crops and all crop residues should be left on the ground."

"eERO","4w27","Erosion control is not a management concern on these hydric soils."

"fIRR","4w27","If cultivated, highest yields require irrigation during periods of low rainfall."

"hPAS","4w27","These soils are only fairly suited to pastures and hay crops. Low to very low available water capacity is the main limitation. Improved grasses such as the improved bahiagrasses are adapted. Several varieties of clovers are also well adapted where properly managed. Moderate yields require nutrient management, water table management, and controlled grazing to prevent overgrazing."

"iWMG","4w27","If cropped, these hydric soils need a total water table management system to remove excess water rapidly and provide a means of applying subirrigation. Tile drains, open ditches, and/or tail-race recovery systems may be needed to maintain the preferred water table depths for the planted crop. To obtain adequate drainage, the spacing of tile drains is important."

5w4 Hydric phase of Map Unit 29(Nutall)

"aSOI","5w4","This map unit consists of nearly level, poorly drained and very poorly drained soils in depressions. They have sandy or loamy upper layers less than 20 inches thick, and slowly permeable clayey subsoil layers. They are covered with shallow water much of the time."

"bSAC","5w4","Wetness and ponding severely limits the use of the root zone of these soils for agronomic crops."

"cH2O","5w4","In normal years these hydric soils have a seasonal high water table within 6 inches of the surface for 2 to 6 months or more. In other months the water table is usually below these depths. These soils are also ponded frequently for long duration. Most often ponding occurs in the winter and spring, but it may occur during any wet season."

"dCUL","5w4","These hydric soils are not suited to cultivated crops without an extensive water table management system."

"eERO","5w4","Erosion is not a management concern for crops produced on these hydric soils."

"fIRR","5w4","If cultivated, highest yields require irrigation either subirrigated through the extensive water table management system or by sprinklers."

"hPAS","5w4","These hydric soils are not suited to pasture or hay crops without an extensive water table management system."

"iWMG","5w4","If these hydric soils are cultivated, an extensive water table management system is needed for crop and pasture production on these soils. It should remove excess water rapidly and provide a means of applying subirrigation. Dikes and a pumping systems are needed for ponding control and tile drains and open ditches are needed to maintain the preferred water table depth. Rarely are drainage and ponding protection economically feasible and environmentally sound."

5w6 Hydric phases of Map Unit 28, 39

"aSOI","5w6","This map unit consists of nearly level, very poorly drained and poorly drained soils on flood plains. They are saturated or flooded with water much of the time."

"bSAC","5w6","Wetness and flooding severely limits the use of the root zone of these soils for agronomic crops."

"cH2O","5w6","In normal years these hydric soils have a seasonal high water table within 6 inches of the surface for 2 to 6 months or more. In other months the water table is usually below these depths. These soils are also flooded commonly for long duration. Most often flooding occurs in the winter and spring, but it may occur during any wet season."

"dCUL","5w6","These hydric soils are not suited to cultivated crops without an extensive water table management system."

"eERO","5w6","Erosion is not a management concern on crops produced on these hydric soils."

"fIRR","5w6","If cultivated, highest yields require irrigation either subirrigated through the extensive water table management system or by sprinklers."

"hPAS","5w6","These hydric soils are not suited to pasture or hay crops without an extensive water table management system."

"iWMG","5w6","If these hydric soils are cultivated, an extensive water table management system is needed for crop and pasture production on these soils. It should remove excess water rapidly and provide a means of applying subirrigation. Dikes and a pumping systems are needed for flood control and tile drains and open ditches are needed to maintain the preferred water table depth. Rarely are drainage and flood protection economically feasible and environmentally sound."

6s4 Map Unit 19

"aSOI","6s4","This map unit consists of excessively drained, nearly level, gently sloping and sloping soils on ridges along the coast and inland. They have sandy layers to more than 80 inches deep."

"bSAC","6s4","The soils have a loose, well aerated root zone to depths of more than 80 inches. The available water capacity averages very low in the root zone. Natural fertility is very low and nutrients are rapidly leached from the soil. Rainfall is rapidly absorbed, on protected areas and there is little runoff."

"cH2O","6s4","In normal years these soils do not have a seasonal high water table within a depth of 72 inches."

"dCUL","6s4","Due to the very low natural fertility, droughtiness, and the rapid leaching of plant nutrients, these soils are not suited to cultivated field crops."

"eERO","6s4","If these soils are cultivated, erosion control measures that would adequately protect the soil and water resource base are difficult to install and/or maintain."

"fIRR","6s4","Irrigation of high value crops is usually feasible where irrigation water is readily available. The rate of water application should be low enough to prevent runoff and erosion."
A well designed irrigation system to maintain optimum moisture conditions is needed to assure acceptable citrus yields."

"hPAS","6s4","These soils have only fair suitability for pastures. Grasses such as hybrid bermudagrass and bahiagrass make only fair growth where an intensive nutrient management system is maintained. Clovers are not adapted."

"iWMG","6s4","Water table management is not normally practiced on these soils."

6s7 Map Unit 25

"aSOI","6s7","This map unit consists of nearly level, somewhat poorly and moderately well drained soils on low ridges of the flatwoods. They have sandy layers to more than 72 inches deep. A layer 20 to 60 inches below the surface is weakly cemented with dark colored organic material."

"bSAC","6s7","The root zone is limited by a water table during wet seasons and by droughtiness during periods of low rainfall. The available water capacity is very low in the root zone. Natural fertility is very low and crop response to nutrient management is only fair. The internal drainage rate is slow under natural conditions but response to artificial drainage is rapid."

"cH2O","6s7","In normal years these soils have a seasonal high water table at a depth of 18 and 30 inches for 1 to 4 months. In other months the water table is usually below this depth. Only rarely, during periods of high rainfall, is the water table above 18 inches."

"dCUL","6s7","Due to the very low natural fertility, wetness in wet seasons, droughtiness during periods of low rainfall, and the rapid leaching of plant nutrients, these soils are not suited to cultivated field crops."

"eERO","6s7","If these soils are cultivated, erosion control measures are not normally needed."

"fIRR","6s7","Irrigation of high value crops is usually feasible where irrigation water is readily available."

"hPAS","6s7","These soils have only fair suitability for pastures. Grasses such as hybrid bermudagrass and bahiagrass make only fair growth where an intensive nutrient management system is maintained. Clovers are not adapted."

"iWMG","6s7","Water table management is not normally practiced on these soils."

6s22 Map Unit 12

aSOI","6s22","This map unit consists of nearly level and gently sloping, well drained to moderately well drained soils on low uplands. They have sandy surface and subsurface layers 3 to 20 inches thick over fractured, porous limestone rock."

"bSAC","6s22","These soils have a well aerated root zone that is limited to less than 20 inches by fractured, porous limestone. The available water capacity is low in the root zone. Natural fertility is low and crop response to fertilization is poor. Rainfall is rapidly absorbed with little runoff. The erosion hazard is slight."

"cH2O","6s22","In normal years these soils have a seasonal high water table at a depth of more than 48 inches for most of the year. It is in the fractured, porous limestone. Rarely, only during periods of high rainfall and only for a few days, is the water table above the normal seasonal high water table depth."

"dCUL","6s22","Due to droughtiness, rapid leaching of plant nutrients, thin rooting zone, and shallow depth to rock, these soils are not suited to cultivated field crops."

"eERO","6s22","If these soils are cultivated, erosion control measures are not normally needed. Soil improving cover crops and all residues of other crops should be left on the field to improve the poor fertility of the topsoil."

"fIRR","6s22","Irrigation of high value crops may be feasible where irrigation water is readily available."

"hPAS","6s22","These soils are poorly suited for pastures. Grasses such as hybrid bermudagrass and bahiagrass make only fair growth where an intensive nutrient management system is maintained, but then yields are reduced by periodic droughtiness. Clovers are not adapted. Controlled grazing is needed to maintain to cover."

"iWMG","6s22","Water table management is not normally practiced on these soils."

6w3 Hydric phases of Map Units 35, 39

"aSOI","6w3","This capability unit consists of nearly level, very poorly drained soils that occur in depressions. These soils are mineral soils."

"bSAC","6w3","The root zone is restricted by a water table that is at or above the surface during wet seasons. The internal drainage is slow and response to artificial drainage is poor. The available water capacity is medium. Permeability is rapid to moderately rapid in the surface layers and slow to very slow in the subsoils. Natural fertility is low to medium, and organic matter content is low."

"cH2O","6w3","In normal years these hydric soils have a seasonal high water table within 6 inches of the surface for 2 to 6 months or more. In other months the water table is usually below these depths. These soils are also ponded frequently for long duration with water approximately 2 feet above the surface. Most often ponding occurs in the winter and spring, but it may occur during any wet season."

"dCUL","6w3","These soils are not suited to cultivated crops without extensive water table and ponding control management systems. Wetness, restricted rooting zone, slow internal drainage, and difficulty in obtaining adequate drainage outlets severely limit their use for cultivated crops. Water table management systems are hard to establish and maintain."

"eERO","6w3","Erosion is not a management concern on crops produced on these hydric soils if they happen to be cultivated."

"fIRR","6w3","If cultivated, highest yields require irrigation either subirrigated through the extensive water table management system or by sprinklers."

"hPAS","6w3","These hydric soils are not suited to pasture or hay crops without an extensive water table management system."

"iWMG","6w3","Because of the slow internal movement of water, and the usual lack of good outlets in areas where these soils occur, good water table management systems are difficult to establish and maintain. These systems normally require an extensive system of canals and ditches. A diking and/or pumping system for control of ponding water is also needed."

6w4 Hydric phase of Map Unit 36, 52

"aSOI","6w4","This capability unit consists of nearly level, very poorly drained soils that occur on flood plains. These soils are mineral soils."

"bSAC","6w4","The root zone is restricted by a water table that is at or above the surface during wet seasons. The internal drainage is slow and response to artificial drainage is poor. The available water capacity is medium. Permeability is rapid to moderately rapid in the surface layers and slow to very slow in the subsoils. Natural fertility is low to medium, and organic matter content is low."

"cH2O","6w4","In normal years these hydric soils have a seasonal high water table within 6 inches of the surface for 2 to 6 months or more. In other months the water table is usually below these depths. These soils are also flooded frequently for long duration. Most often flooding occurs in the spring and summer, but it may occur during any wet season."

"dCUL","6w4","These soils are not suited to cultivated crops without extensive water table and flood control management systems. Wetness, restricted rooting zone, slow internal drainage, and difficulty in obtaining adequate drainage outlets severely limit their use for cultivated crops. Water table management systems are hard to establish and maintain."

"eERO","6w4","Erosion is not a management concern on crops produced on these hydric soils if they happen to be cultivated."

"fIRR","6w4","If cultivated, highest yields require irrigation either subirrigated through the extensive water table management system or by sprinklers."

"hPAS","6w4","These hydric soils are not suited to pasture or hay crops without an extensive water table management system."

"iWMG","6w4","Because of the slow internal movement of water through the subsoils, and usually the lack of good outlets in areas where these soils occur, good water table management systems are difficult to establish and maintain. These systems normally require an extensive system of canals and ditches. A diking and/or pumping system for control of flood waters is also needed."

7w2 Hydric phases of Map Units 16, 52(Croatan part)

"aSOI","7w2","This map unit consists of nearly level, very poorly drained organic soils in depressions and floodplains. These are hydric soils."

"bSAC","7w2","The root zone is limited by water that is above the surface in wet seasons. The available water capacity averages high in the root zone. Natural fertility is high. The internal drainage rate is very slow in the natural condition and seepage water seeps from the soil in wet seasons."

"cH2O","7w2","In normal years these soils have a seasonal high water table within 6 inches of the surface for 2 to 6 months of most years. During other months the water table is deeper. These soils are also subject to frequent ponding and/or flooding. Only rarely is the water table below the surface for an extended period."

"dCUL","7w2","These soils are not suited to cultivated crops without extensive water table and flood control management systems. Wetness, restricted rooting zone, slow internal drainage, and difficulty in obtaining adequate drainage outlets severely limit their use for cultivated crops. Water table management systems are hard to establish and maintain."

"eERO","7w2","Due to the lack of these soils being cultivated, erosion control is not a management concern."

"fIRR","7w2","Due to the lack of cultivation, irrigation is not a normal practice on these soils."

hPAS","7w2","These hydric soils are not suited to pasture or hay crops without an extensive water table management system. Due to the difficulty of installing these measures and the lack of outlets in most areas, they have seldom, if ever, been used for pasture."

"iWMG","7w2","Water table management is not a normal practice on these soils because of the lack of cultivation."

7w6 Hydric phase of Map Unit 29(Tooles and Chaires parts), 36, 44

"aSOI","7w6","This map unit consists of nearly level, very poorly drained soils that occur in depressions. They have thick black or very dark gray surface layers. The subsoil is loamy and extends to the limestone bedrock at 40 to 60 inches. Permeability is moderately slow in clayey layer, and moderate in loamy layer. These soils are subject to ponding."

"bSAC","7w6","These soils have a root zone that is limited by water that covers the surface for more than 6 months during most years under natural conditions. These soils have moderate natural fertility, but wetness and ponding makes them unsuited to cultivated crops."

"cH2O","7w6","In normal years these soils have a seasonal high water table up to 2 feet above the surface for up to 6 months of the year. During other months the water table is deeper. Only rarely is the water table below the surface for an extended period."

"dCUL","7w6","Due to extreme wetness, these soils are not suited to cultivated crops."

"eERO","7w6","Due to the lack of these soils being cultivated, erosion control is not a management concern."

"fIRR","7w6","Due to the lack of cultivation, irrigation is not a normal practice on these soils."

"hPAS","7w6","If water control measures are established, this soil would be moderately well suited to improved pastures. Due to the difficulty of installing these measures and the lack of outlets in many areas, it has seldom, if ever, been used for pasture."

"iWMG","7w6","Water table management is not a normal practice on these soils because of the lack of cultivation."

8e1 Map Unit 50

"aSOI","8e1","This map unit consists of areas where soil materials have been removed by excavation or mining operations. Some of these areas fill with water periodically and other areas have geologic materials exposed."

"bSAC","8e1","Due to infertile exposed geologic soil material, these areas are not vegetated."

"cH2O","8e1","These soils have a highly variable water table."

"dCUL","8e1","Due to the infertile material, these soils are not suited to cultivated crops."

"eERO","8e1","Due to the lack of these soils being cultivated, erosion control is not a management concern."

"fIRR","8e1","Due to the lack of cultivation, irrigation is not a normal practice on these soils."

"hPAS","8e1","Due to the infertile material, these soils are not suited to hay and pasture."

"iWMG","8e1","Water table management is not a normal practice on these soils because of the lack of cultivation."

8w2 Map Units 6, 54

"aSOI","8w2","This map unit consists of nearly level, very poorly drained soils of the tidal marshes."

"bSAC","8w2","The variety of plants growing on these soils is limited to those that are tolerant of extreme wetness and saline conditions."

"cH2O","8w2","In normal years these soils have a seasonal high water table at the surface throughout the year. These soils are also subject to daily tidal flooding. Only rarely is the water table below the surface for an extended period."

"dCUL","8w2","Due to extreme wetness and salinity, these soils are not suited to cultivated crops."

"eERO","8w2","Due to the lack of these soils being cultivated, erosion control is not a management concern."

"fIRR","8w2","Due to the lack of cultivation, irrigation is not a normal practice on these soils."

"hPAS","8w2","Due to extreme wetness and salinity, these soils are not suited to hay and pasture."

"iWMG","8w2","Water table management is not a normal practice on these soils because of the lack of cultivation."

ECOLOGICAL COMMUNITIES

kRNG - Rangeland (not developed, no significant application in the area served by this field office.)
lWLD - Wildlife
mWOD - Woodland

Longleaf Pine-Turkey Oak Hills - Map Units 4, 17, 19, 21, 47

("lWLD","04") "This ecological community is suited for deer and turkey, especially as escape cover. Many birds inhabit the area including warblers, towhees, flycatchers, scrub jays, and quail. Several varieties of native legumes furnish food (seeds) for the birds. Timber harvest and other disturbances increase wildlife food by increasing the amount and types of herbaceous plants and by sprout production."

("mWOD","04") "This community has a moderately high potential for commercial production of pulp and timber. These soils create moderate equipment limitations and seedling mortality problems. Sand pine and longleaf pine are the commercial species suited to planting."

Mixed Hardwood And Pine - Map Units 7, 8, 11, 12, 14, 27, 30, 48

("lWLD","05") "This community offers very good habitat for deer, turkey, squirrel, and many songbirds. Hardwood mast (acorns, nuts, fruits, buds, berries) furnish a good source of wildlife food. Mature hardwoods and snags provide good nesting sites for birds. Habitat is good for raccoons, opossums, bobwhite quail and dove, fair for reptiles, and poor for most amphibians."

("mWOD","05") "This community has a high potential productivity for commercial wood production. There are no serious management problems. Slash pine and loblolly pine are the commercial species suited to planting."

North Florida Flatwoods - Map Units 3, 10, 18, 23, 25, 32, 33, 37, 38, 51

("lWLD","07") "The North Florida Flatwoods community is well suited for deer, quail and turkey. It is fair for squirrels and well suited for many songbirds, particularly warblers. It is also well suited for bobcat, skunks, opossums, and raccoons. It is poorly suited for dove."

("mWOD","07") "This community has a moderate potential productivity for commercial wood production. There are moderate equipment limitations and seedling mortality due to wet soil conditions. The commercial species suitable for planting is slash pine."

Wetland Hardwood Hammocks - Map Units 26, 29*

("lWLD","12") "The Wetland Hardwood Hammocks community is well suited for wild hogs, deer, turkey, black bear, squirrels, woodpeckers, owls, and furbearers. It is poor for quail and dove and fair for many songbirds."

("mWOD","12") "This community has a moderately high potential productivity for commercial wood production. There are moderate equipment limitations and seedling mortality due to wet soil conditions and plant competition. The commercial species suitable for planting is slash pine and loblolly pine."

Salt Marsh - Map Units 6, 54

("lWLD","18") "The salt marsh community has good habitat for a variety of wildlife. The habitat type is usually maintained by natural forces and influences such as tidal action and periodic hurricanes. Storms usually cause the creation of "open" water in salt and brackish marshes and also may change salinities. The resulting effect is that plant succession is set back and more favorable habitat may be created for waterfowl, furbearers, and some other forms of wildlife such as wading birds. Artificially created dikes to control salinity are used in managing marsh plants for wildlife. Prescribed burning is also a technique used in marsh management."

("mWOD","18") "The soils of this community are unsuited to commercial wood production."

Swamp Hardwoods - Map Unit 16*, 28, 29*, 35*, 36*, 39, 44, 52

("lWLD","21") "This community hosts a large variety of wildlife. It is especially well suited for waterfowl, reptiles, amphibians, and mammals. Animals found in this community must withstand the flooding which occurs periodically. Gray squirrel, mink, raccoon, and river otter are the most commonly found mammals. Many birds inhabit this area including chickadees, titmice, yellow-billed cuckoo, wood duck, limpkin, flycatchers, owls, turkey, woodcock, hooded warbler, cedar waxwing, woodpeckers, and wren. The various species of hardwood vegetation provide good food and cover for these species."

("mWOD","21") "This Swamp Hardwoods community is generally not used for commercial woodland production except for limited harvest of hardwoods. However, this community does have a high potential for commercial woodland production on areas with adequate surface drainage. There are severe equipment limitations and seedling mortality due to the poorly to very poorly drained soil conditions. Slash pine is suitable for planting in areas with adequate surface drainage."

Shrub Bogs-Bay Swamps - Map Unit 16*, 35*, 36*

("lWLD","22") "This ecological community's primary value to game animals is the escape cover furnished to deer, turkey, and quail by the thick growth. This cover is also good habitat for a variety of frogs, salamanders, crayfish, predatory snakes, and raccoon."

("mWOD","22") "This ecological community is generally not used for commercial woodland production except for limited harvest of hardwoods. However, this community does have a high to moderate potential for commercial woodland production on areas with adequate surface drainage. There are severe equipment limitations and seedling mortality due to the poorly to very poorly drained soil conditions. Slash pine is suitable for planting in areas with adequate surface drainage."

* - These Map Units have more than one type of Ecological Community.

URBAN USES

oURB - Urban Use Statement

Map Units 6, 16, 28, 29, 35, 36, 39, 44, 52, 54

"AREA 1 oURB GROUP","A101","Soils in this group have severe limitations for urban uses. Seasonal flooding or ponding is the primary limiting factor. Additionally, other severely limiting factors probably will be present in these soils."

Map Units 10, 23, 26, 32, 33, 37, 38, 51

"AREA 1 oURB GROUP","A102","Soils in this group have severe limitations for most urban uses. A seasonal high water table saturating these soils at or near the surface is the primary limiting factor. Additionally, other severely limiting factors may be present in these soils."

Map Units - none

"AREA 1 oURB GROUP","A103","Soils in this group have moderate to severe limitations for most urban uses. Limitations resulting from the properties of clayey layers within these soils dominate this group. Additionally, other limiting factors may be present in these soils."

Map Units 3, 14, 18, 25, 30, 53

"AREA 1 oURB GROUP","A104","Soils in this group have moderate limitations for many urban uses. Soil properties related to texture and wetness primarily affect this group. Soils of this group may have severe limitations for a specific urban use."

Map Units 4, 7, 8, 17, 19, 21, 47, 48

"AREA 1 oURB GROUP","A105","Soils in this group have slight limitations for many urban uses. Soils of this group may have moderate or even severe limitations for a specific urban use. Soil properties related to texture, slope, or wetness may affect a specific urban use."

WATER QUALITY: PESTICIDE AND NUTRIENT MANAGEMENT

sWQ - Water Quality Statement
tPES - Pesticide Management Statemtent
uNUT - Nutrient Management Statement

Map Units - none

"sWQ","01","These soils have a low potential for pesticide leaching to groundwater and a low potential for pesticide runoff to surface water. They have a medium or high potential for nitrogen leaching to groundwater and a low potential for phosphorous runoff to surface runoff."

"tPES","01","The Florida Pest Control Guide contains a listing of pesticides suitable for each type of pest and is available from the Cooperative Extension Service. Read and follow pesticide labels."

"uNUT","01","A soil test will be used as a guide to determine plant nutrient needs. In addition, a listing of nitrogen and phosphorous requirements by crop type is available from the Cooperative Extension Service. Nutrients should be added at the rate needed by the crop grown or according to the producer's goals, whichever is lower."

Map Units - 4, 7, 8, 12(Seaboard part), 17, 19, 21, 47, 48

"sWQ","02","These soils have a medium or high potential for pesticide leaching to the groundwater and a low potential for pesticide runoff from the field(s) to surface water. They have a medium or high potential for nitrogen leaching to the groundwater and a low potential for phosphorous runoff to surface runoff."

"tPES","02","The Florida Pest Control Guide from the Cooperative Extension Service contains a list of pesticides suited to each pest. This list also contains Relative Leaching Potential Index (RLPI) values. While any approved pesticide listed in the guide can be used, the applicator should consider for use pesticides with a larger RLPI value and Health Advisory Level (HAL or HALEQ) value. Read and follow pesticide labels."

"uNUT","02","A soil test will be used as a guide to determine plant nutrient needs. In addition, a listing of nitrogen and phosphorous requirements by crop type is available from the Cooperative Extension Service. Nutrients shall be added at the rate needed by the crop grown or according to the producer's goals, whichever is lower."

Map Units - 3, 14, 18, 23, 25, 27(Moriah part), 30, 32, 33, 35, 36, 37, 38, 39, 51

"sWQ","03","These soils have a medium or high potential for pesticide leaching to groundwater and a medium to high potential for pesticide runoff to surface water. They have a medium or high potential for nitrogen leaching to the groundwater and a medium or high potential for phosphorous runoff to surface runoff."

"tPES","03","The Florida Pest Control Guide from the Cooperative Extension Service contains a list of pesticides suited to each pest. This list also contains Relative Leaching Potential Index (RLPI) and Relative Runoff Potential Index (RRPI) values. While any approved pesticide listed in the guide can be used, the applicator should consider for use pesticides with a larger RLPI value, RRPI value, Health Advisory Level (HAL or HALEQ) value, and Aquatic Toxicity value. Read and follow pesticide labels."

"uNUT","03","A soil test will be used as a guide to determine plant nutrient needs. In addition, a listing of nitrogen and phosphorous requirements by crop type is available from the Cooperative Extension Service. Nutrients shall be added at the rate needed by the crop grown or according to the producer's goals, whichever is lower."

Map Units 6, 10, 11, 12(Shadeville part), 16, 26, 27(Pilgrims), 28, 29, 44, 52, 54

"sWQ","04","These soils have a low potential for pesticide leaching to groundwater and a medium or high potential for pesticide runoff to surface water. They have a medium or high potential for nitrogen leaching to groundwater and a medium or high potential for phosphorous runoff to surface runoff."

"tPES","04","The Florida Pest Control Guide from the Cooperative Extension Service contains a listing of pesticides suited to each pest. This list also contains Relative Runoff Potential Index (RRPI) values. While any approved pesticide listed in the guide can be used, the applicator should consider for use pesticides with a larger RRPI value and a larger Aquatic Toxicity value. Read and follow pesticide labels."

"uNUT","04","A soil test will be used as a guide to determine plant nutrient needs. In addition, a listing of nitrogen and phosphorous requirements by crop type is available from the Cooperative Extension Service. Nutrients shall be added at the rate needed by the crop grown, or according to the producer's goals, whichever is lower."